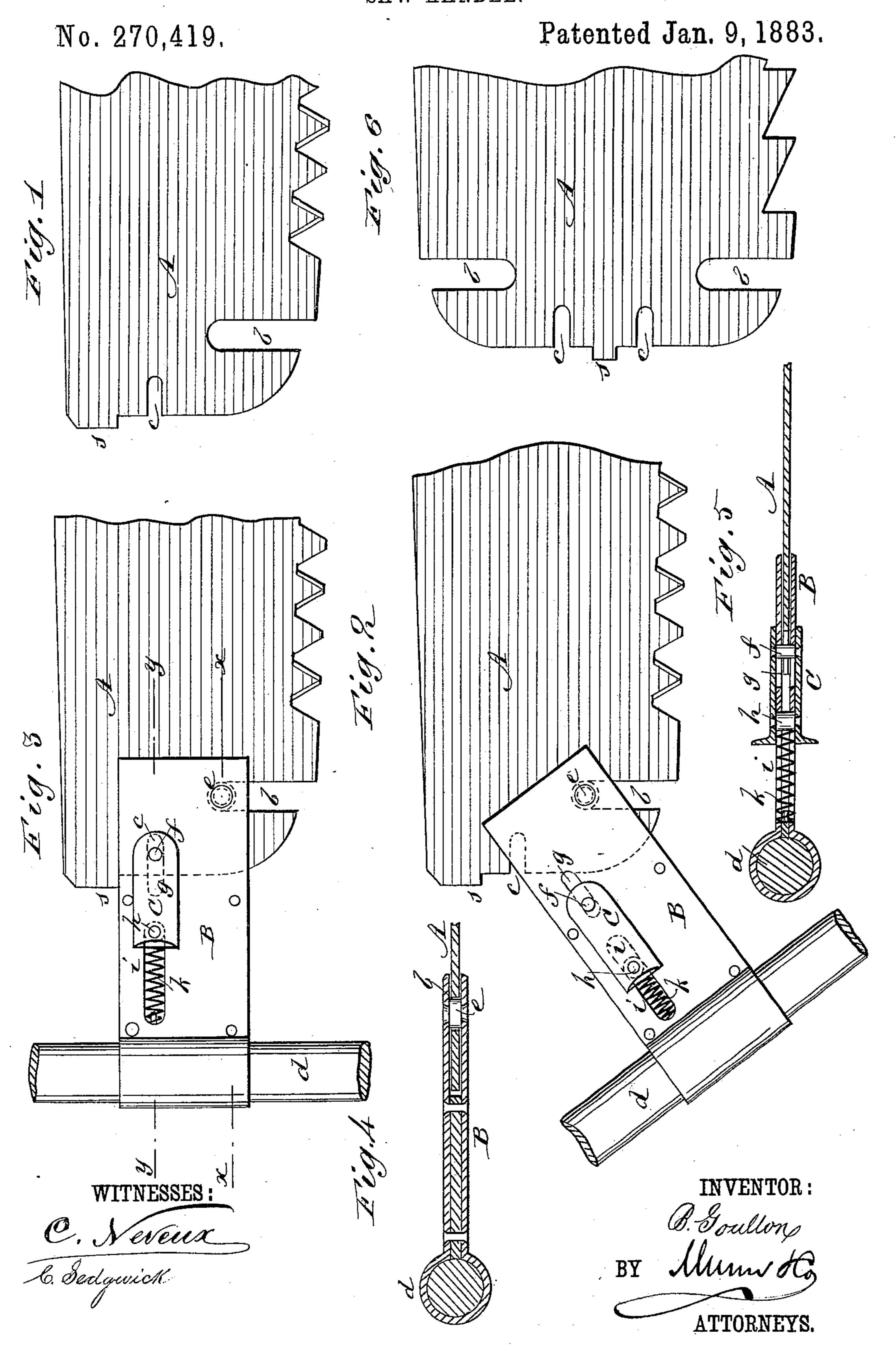
## B. GOULTON.

SAW HANDLE.



## United States Patent Office.

BENJAMIN GOULTON, OF KACO, WANGAROA, NEW ZEALAND.

## SAW-HANDLE.

SPECIFICATION forming part of Letters Patent No. 270,419, dated January 9, 1883.

Application filed October 10, 1882. (No model.) Patented in New Zealand March 6, 1882, No. 601.

To all whom it may concern:

Be it known that I, BENJAMIN GOULTON, of Kaco. Wangaroa, in the county of Mangonui, New Zealand, have invented certain new and useful Improvements in Means for Attaching Handles to Crosscut, Pit, and other Saws, of which the following is a full, clear, and exact description.

This invention relates to means for attaching loose or removable handles to crosscut, pit, and other saws, and has for its object increased facility of attaching and detaching said handles, together with other advantages, as hereinafter explained.

The invention consists in a peculiar slotted construction of the saw or saw-blade at either of its ends, and a handle or handle-socket provided with an engaging cross-pin and a locking-catch, preferably made automatic by means of a spring, for securing said handle or handle-socket to the end of the saw, substantially as hereinafter specified.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a side view of the one end portion of a crosscut-saw constructed in accordance with the invention. Fig. 2 is a farther side view of the same with the handle in course of being fitted to its place; and Fig. 3, a side view, showing the handle as secured in position on the end of the saw. Fig. 4 is a longitudinal section, in part, on the line x x in Fig. 3; and Fig. 5, a farther longitudinal section, in part, on the line y y in Fig. 3. Fig. 6 is a side view of the one end portion of a pit-saw, showing a modified construction for varying the position of the handle.

Although my invention is only shown in the drawings as applied to the one end of a saw, it will readily be understood that both ends are or may be alike.

The invention is more particularly intended for crosscut - saws, but, as already stated, is also applicable to other saws.

The handle is mainly constructed of thin metal plates, and slips onto the end of the saw or receives the end of the saw within it as other loose handles of crosscut-saws have been fitted; but it importantly differs in the means

provided for attaching it to and detaching it from the saw.

Referring in the first instance to the first five figures of the drawings, either end portion 55 of the saw A has a slot, b, cut or formed in it from the front edge of the saw toward the back thereof, or at right angles to the length of the saw, the same presenting an open end where it joins the cutting edge of the saw. It also 60 has another, and it may be smaller, open outer ended slot, c, formed in its edge and running in direction of the length of the saw; likewise has a shoulder projection, s, on said end edge between the slot c and the back edge of the 65 saw.

B is the handle or metal socket portion thereof, constructed at its inner end to slip over or receive within it the end of the saw, and provided at its back or outer end with the usual 70 hand-gripping cross-bar d. Said handle-socket is provided at its jaw or saw-receiving end with a cross rivet or pin, e, arranged to fit or play within the slot b when the whole handle is being fitted to its place, as shown in Fig. 2. The 75 whole handle then turns by this pin e as a pivot within and against the back end of the slot btill it is brought into its proper closed position relatively to the end of the saw, as shown in Fig. 3, when it is secured or locked by a cross-80 pin or projection, f, on a slide, C, shooting into engagement with the slot c in the end edge portion of the saw. The slide C, which carries the pin f, that works through and along a slot, g, in the handle-socket B, is fitted to hug the 85 outsides of said socket, and is connected by a cross-pin, h, which passes through another slot, i, in the socket and serves as a bolster for a spring, k, to press against and urge the slide C forward. In this way the whole handle be- 90 comes self-locking, as it is adjusted into position, by first entering the pin e within the slot b and turning the handle up till it is arrested by striking the shoulder projection s. In the working of the saw there will be no tendency 95 of the handle to get loose, as the strain comes entirely upon the pin e and not upon the slide C or its locking-pin f, and by simply drawing back the slide C the whole handle, on being pressed down, is readily detached from the saw 100 when required.

By the construction of the handle and end

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of the saw, as described, the handle becomes self-adjusting in its fit to the saw, and the spring k not only provides for its being self-locking, but for holding it in place. If desired, said spring might be dispensed with, and the slide C be slid forward by hand and be secured by a set-screw or otherwise from slipping back. A spring-catch, however, which the slide with its locking-pin and spring forms, is preferable.

10 Fig. 6 of the drawings shows the end of a pit-saw, A, as formed with duplicate slots bb, the one of which projects inward from the cutting-edge of the saw, and the other from the back edge thereof; also shows duplicate slots cc in the end edge of the saw, with the shoulder projection s between them. This construction provides for the handle B, with its accompanying slide C, and pins ef being attached closer either to the front or back edge of the saw, as the work may require.

Having thus described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. The saw-blade A, having a shoulder, s, and slot c in its end, a slot, b, in its side, and the adjacent corner cut away, having the cor-

ner of the blade of the saw curved in the arc of a circle from the inner end of slot b as a center, as and for the purpose specified.

2. The combination, with the saw A, having 30 a shoulder, J, an end slot, c, a slide slot, b, and the adjacent corner rounded, of the handle or socket B, provided with the fixed pin c, a sliding pin. f, and a shoulder adapted to fit shoulder J at the same time that said pins c and f fit in 35 the slots b and c, respectively, as and for the purpose specified.

3. The combination, with the saw or saw-blade A, having open-ended slots bc, arranged at right angles to each other, or thereabout, as 40 described, of the handle or handle-socket B, provided with a cross-pin, c, for fit within the slot b of the saw, and a spring-catch, C, arranged to engage with or in the slot c of the saw, substantially as specified.

The foregoing specification of my improvement signed by me this 21st day of July, 1882. BENJAMIN GOULTON.

Witnesses:

James Houbister,
Sidney Campbell,
Both clerks, Mangonui.